To: Subcommittee on Energy and Mineral Resources
From: Andrew Curley, UNC – Chapel Hill and Ashley Claw, Duke University
Date: April 12, 2018
RE: "The Benefits of the Navajo Generating Station on Local Economies"

Executive Summary

With the decline of coal, the Navajo Nation is at risk of losing hundreds of jobs and millions of dollars in revenue. The history of the Navajo Generating Station reveals conditions of inequality between the federal government, the state, and the tribe that puts Navajo communities at great risk in all facets of coal production. From the toxicity left on the land to the lost jobs and revenues, Navajo (and Hopi) people pay the costs of Arizona's energy and water infrastructure.

The Navajo Generating Station (NGS) is a 2,250-megawatt coal-fired power plant.[1] It is the largest contributor of greenhouse gases in all of Indian Country. The Navajo Nation signed a lease agreement with the original five owners of the power plant in 1969 and the plant was constructed in conjunction with the Kayenta Mine on Black Mesa in the center of the reservation. The Kayenta Mine, operated by Peabody Coal, supplies coal to the power plant. In combination, NGS and Kayenta Mine employ roughly 700 workers. The Arizona utility, the Salt River Project (SRP), has operated the plant since it started operations in the early 1970s, but it was not until 2015 when SRP became the majority owner of the plant.[2] The Navajo Nation Council passed leases with SRP in 1969 and again in 2013, but the 2013 lease was rescinded and replaced recently with a new one that extends the operating life of NGS until 2019.

During the 1960's, the Navajo Nation pursued popular ideas at the time of modernization and development, particularly in the field of energy production. In 1961, the Arizona Power Authority (APA) submitted an application to the Federal Power Commission to build dams along the Colorado River in close proximity to the Grand Canyon and the Navajo Nation. These projects, "Marble Canyon" and "Bridge Canyon" dams were criticized because they would give Arizona water in the Upper Basin of the Colorado River and flood portions of the Grand Canyon. APA also denied Navajo rights to Colorado River water when it proposed the dams, prompting tribal lawmakers to partner with the Bureau of Reclamation (BOR) because BOR would better recognize tribal rights. BOR eventually replaced the dam projects with NGS to provide power for CAP. Other utilities also bought into the plant and expanded its regional production.

However, the legacy of NGS is complicated for the Navajo Nation and its people. Navajo people have very different and often conflicting ideas about the future of the power plant. It is undeniable that the plant and its feeder mine, the Kayenta Mine, provide important sources of revenues and jobs for tribe. On the other hand, the mounting costs to the environment and perpetuation of economic dependency are negative aspects of the Navajo coal economy. In the end, colonialism continues to harm the Navajo Nation and its people. Until colonial conditions are challenged and changed politically, socially, and economically, the Navajo Nation will continue to struggle.

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[1] https://www.srpnet.com/about/stations/ngs/default.aspx
[2] https://www.nhonews.com/news/2015/jun/30/guest-column-srps-purchase-of-ladwps-share-of-ngs/

Introduction

The story of coal in the Navajo Nation is the story of both boom and busts. For most of its history, it was worthless soft rock protruding from the earth. In some places, coal would color the ground black and on rare occasion catch fire from a lightning strike. However, in the span of roughly fifty years, it would become the most important source of economic revenue for the tribe. Today, however, the coal market is collapsing and the U.S. energy landscape is shifting toward natural gas. Suddenly stable jobs and revenues are gone and industrial infrastructure is abandoned. Literally, all that was solid melted into air; coal was extracted and burned, sold, and converted into noxious emissions. Within a generation, the inherent subterranean wealth of the Navajo Nation vanished. Years of revenues, jobs, and cheap energy lost in a quest for modernization and development. When coal finally ends, as it inevitably will for the Navajo people, what will the tribe have gained or lost? Whether you worked in the mine or organized against it as an "environmentalist," survivability is the existential dilemma that is the legacy of coal. Was it worth it? Were there ever alternatives? Are there ever alternatives? What is the future of the Navajo Nation without coal?

How do we understand the phenomenon of coal in the Navajo Nation? Is it simply a form of dependence? Or is it a source of opportunity? These are not mutually exclusive explanations, but provide different political tone and emphasis. For tribal members and elected officials, "dependency" resonates in discourse much differently than "opportunity." Such distinctions have political meaning. They insinuate coal is either a positive or a negative resource for the tribe. Although these explanations account for coal's persistence, they fail to address its deeper resonance among competing actors in the Navajo Nation. In 2013, I witnessed a renewal of a 50-year coal lease that exposed the social forces and contradictions at work that maintain, reproduce, defend, and critique coal. Although coal was initiated in the 1960s, it was renewed in the 2010s in an era of climate change and shifting environmental governance under very similar lease conditions.

In 2013, tribal officials fully embraced the renewal of coal despite the fact they knew coal companies have short-changed the Navajo Nation in the past. They did this primarily because of the tribe's reliance on coal money for revenues. We also know the sordid legacies extraction has left on the land, especially in the case of uranium mining. Despite what was known about environmental and health hazards in 2013, the Navajo Nation tribal government attempted to both renew and intensify its relationship with coal. This is a consequence of economic dependency. On the other hand, Navajo coal workers built their identities into their work. They posit a "moral economy" of coal work, an expectation that political actors will do what is necessary to renew and support their source of work. This is a belief that moves away from economic rational. It is a normative framework about what is the right and wrong organization of society.

In this report, I offer the following points: 1) the Navajo Generating Station (NGS) was a subsidy from the Navajo Nation to the State of Arizona at a critical juncture in its history of development. Without the power from NGS, Arizona would not have experienced the growth that it did; 2) because of social and political inequality between the federal government, states, and tribes, Navajo people bear the social, economic, and physical costs of underdevelopment. In short, NGS, coal mining, and the Central Arizona Project operate in a colonial context: 3) Navajo people have varied perspectives on the future of the industry in our communities. In this paper, I will offer two sections: 1) "Navajo Generating Station as a development project" to provide the history of this power plant on the Navajo Nation, 2) "Current Attitudes Toward Navajo Generating Station."

Finally, this report will end with some concluding thoughts about the future of the plant of the Navajo Nation.

2. Navajo Generating Station as a development project

Methodology

The challenge with history is that it is hard to accurately know the intent of past actors who have long since died and left few records of their past actions. This problem is more pronounced in the Navajo Nation, which lacks the archival infrastructure of state and national governments. I examined the archives of the Navajo Times newspaper, the weekly paper for the Navajo Nation, from 1959-1970 taking note of every reference to coal reported in it during the 1960s. I also reviewed the papers of former U.S. Senators Carl Hayden and Barry Goldwater that are housed at Arizona State University in Tempe, Arizona. I assessed material related to the construction of the Central Arizona Project, from its conceptualization to its eventual implementation. I read Navajo correspondence to these Senators during the late 1950s and 1960s that provided interesting insight into how Navajo leadership positioned itself vis-à-vis a larger power structures at the time. In my analysis, I draw mostly on transcripts of discussions among Navajo Nation Council delegates during the passage of critical energy projects in the 1960s: a 1961 Council Resolution "urging the construction" of a dam at a place called, "Marble Canyon" in the Grand Canyon, and a 1966 resolution reversing this action, and subsequent resolutions authorizing the construction of the Navajo Generating Station in the Navajo Nation – initiating the Navajo coal economy in the Western end of the reservation where I did my field research some forty years later. I had to order these transcripts from the Navajo Nation's archives and they are not readily available to the public.

Finding

My main finding, after reviewing the transcripts and considering the written and oral history on the Navajo coal economy, is that council delegates, at the time, believed that their actions preserved and protected the Navajo Nation's resources for the future. Under the conditions of federal-state-tribal relations during the 1960s, in the era of "termination," Navajo council delegates felt their endorsement of large energy projects helped to secure water and land rights for future generations of Navajo people. The Navajo Tribal Council's actions were part of a larger concert of activities to put into place a particular vision of modernization and development that emphasized highways, large-scale energy projects, and massive water infrastructures in the region. As Marc Resiner showed, over the course of the twentieth century, state planners in the Bureau of Reclamation and Army Corps of Engineers saw the rivers of the West as an endless repository of potential dam projects that would ensure institutional relevancy. The Colorado River and its tributaries that ran around and through the Navajo Nation were no exception. The tribal council's resolutions pertaining to the Marble Canyon Dam reflected these priorities, but in ways that situated the Navajo Nation in a relative position of control and provided the tribe a miniscule of say in the development of the region.

Marble Canyon Dam resolutions

Water in the U.S. west is a contentious resource. The Colorado River is one of the most important and disputed water sources in the United States despite the fact that its annual flow is far from comparable to rivers in the East. The river's basin spans several Western states, including Arizona, California, Colorado, Nevada, New Mexico, Utah, and Wyoming. The lawsuit between

the states of Arizona and California for rights to the Lower Colorado River was one of the most expensive and longest lasting lawsuits in the history of the United States (Id). The Navajo coal economy was intricately forged in the resolution of these high stakes political struggles over the Colorado River's water in the Southwest.

The Central Arizona Project (CAP), a massive $3.6 billion public works water canal that annually pumps 1.5 million-acre feet of water from the Colorado River into Phoenix and Tucson, is a powerful political force in Arizona.[3] The project was the outcome of years of feuding between the states of Arizona and California and part of a negotiated settlement between the two states. Eventually Arizona and California compromised over the Lower Colorado Basin. Arizona agreed to give California most of the Colorado River and priority rights to the river in exchange for supporting CAP in Congress. In this context, the Navajo Tribal Council made pragmatic movements and gestures to preserve Navajo resources while agreeing to massive energy projects.

In 1961, the Arizona Power Authority (APA) submitted an application to the Federal Power Commission to build and operate two dams along the Colorado River near the Grand Canyon and on the Western end of the Navajo Reservation. This was the first gesture to develop energy along the river in order to pump water from the Colorado River into Phoenix. They referred to these projects as "Marble Canyon" and "Bridge Canyon" (hereafter Marble Canyon Projects). These were envisioned as hydroelectric dams that would sell power to Phoenix and eventually the Central Arizona Project. During public hearings in Washington D.C., representatives from APA told the Federal Power Commission that the Navajo Tribe had no right or interest in the projects, even if the dam is along the Navajo reservation's western boundary. The tribal council responded with a resolution opposing APS' control over the proposed dams while simultaneously urging the construction of them. **The Council passed a resolution in late May of 1961 to support the Bureau of Reclamation (BOR) efforts to build these dams because the Tribal Council believed that Arizona would block the tribe from benefiting from the project and monopolize Colorado River water.** The Navajo Tribe appealed to the federal government's superior authority over the State of Arizona and asked the BOR to complete the project and prevent Arizona from locking the Navajo Nation out of it. It was the utility's attempt to develop an energy project using Navajo resources without Navajo input, stake, or benefit that was the colonial act.[4]

Council Delegate Howard Gorman from Ganado said, "The Arizona Power Authority only wants to produce power for the Salt River Valley and sell primarily to water users in Arizona, leaving the Navajos out, ignoring their rights entirely." He continued, "Therefore, we want to endorse the Bureau of Reclamation to build the Marble Canyon Dam because the Bureau of Reclamation recognizes the rights of the Navajos … I am quite sure that if the Bureau of Reclamation builds this dam at Marble Canyon, then the western portion of the Navajo reservation would get power; while, if the Arizona Power Authority builds that dam, the western Navajos would be left out entirely." The Navajo Tribal Council, who voted 56-0 in favor of the resolution, gave approval to a hydroelectric dam project on the Colorado River because it could prevent Arizona energy corporations from locking the Navajo people out of access to this water and land. Delegates felt federal authority was better than state authority because federal authority would take into account Navajo claims to the area. That is why the Navajo Tribal Council encouraged the BOR to take over the project. As was stated in the above testimony, Navajo Council Delegates

[3] http://www.cap-az.com/about-us/faq Last accessed 2/15/16

[4] This is learned from reading the Navajo Tribal Council transcripts of May 22, 1961. The Navajo Tribal Council passed a resolution, "Urging Construction of Marble Canyon Dam by the Federal Government as a Bureau of Reclamation Project".

believed that the BOR would give consideration to Navajo interest in areas where the state would not.

By the 1960s, sovereignty was wedded to the goals of modernization and development. In 1966, the Navajo Tribal Council revisited the proposed dam project and reversed itself on the dam. Navajo Council Delegates *opposed* the Marble Canyon Projects in its entirety.[5] For the first time, the Navajo Tribal Council indicated support for the development of a coal-fired power plant on the western end of the reservation. Fifty years later, coal is now an entrenched industry in the region and one that is strongly contested. At the time when it was approved, however, no industry existed. In fact, the Navajo Nation Council believed that coal would be a temporary economy and nuclear would soon outpace it. They never anticipated its eventual social-political embeddedness. The origin of NGS, for the Navajo Nation, was the 1966 legislation to oppose the Marble Canyon Projects.

Attorney Norman Little informed the tribe that they should support coal development because coal and nuclear was cheaper energy to produce than hydroelectric power, the form of energy development originally proposed for the Navajo Nation. As he said rather dramatically, "[L]ong after all of us have left this mortal world coal will still be going strong but when it does run out you have thermo-nuclear power which can create and generate electric power far cheaper than hydro power." The resolution reversing the Navajo Tribal Council's support of the Marble Canyon Projects was reversed with only two dissenting votes on these premises. Tribal delegate Howard Gorman from Ganado spoke the most passionately in favor of reversing the 1961 resolution. In so doing, he expressed Navajo frustration with being taken advantage of and a clear indication that tribal delegates acted in order to preserve tribal resources in a system they recognized was inherently wrong and unfair. Gorman said:

> …We're talking really about Navajo property or recognized something which rightly belongs to the Navajo people, the river, the country…The Federal Government has been taking lands away from us right and left and it has been repeated so many times that the Navajos have just been pressed into a small area…Everybody forgets the Navajo Tribe. Nobody remembers our interests. For that matter these people who are promoting this have apparently no respect for our existence or that we have a legally operated Tribal Council with legal advisors. The ignore all of this.

Why did the politics around the Marble Canyon Projects suddenly shift from tribal support of it to opposition (Needham 2014, Reisner 1993, Greider 1969)? First, water users in the Upper Colorado River Basin believed that the dams would give Arizona users more water than they were entitled. They petitioned their representatives in Utah, Wyoming, and Colorado to oppose any additional dams along the Colorado River and they also opposed the construction of the Central Arizona Project that was understood as a threat to Upper Colorado River Basin users. Second, the Sierra Club opposed the dam projects because they would flood parts of the Grand Canyon (parts outside of the official park boundaries at the time). They launched one of the first public environmental campaigns to oppose the project, taking out an advertisement in the New York Times comparing the flooding of the Grand Canyon with the flooding of the Sistine Chapel. This was unprecedented in U.S. environmentalism at the time. They also petitioned Congress to expand the official boundaries of the Grand Canyon to include sections that would be flooded, thereby preventing BOR the ability to construct the hydroelectric dam. It was one of the most successful and famous

[5] This is learned from reading the Navajo Tribal Council's transcripts of August 3, 1966. The Navajo Tribal Council passed a resolution, "Opposing the Construction of Dams in Marble Gorge and Other Portions of the Grand Canyon."

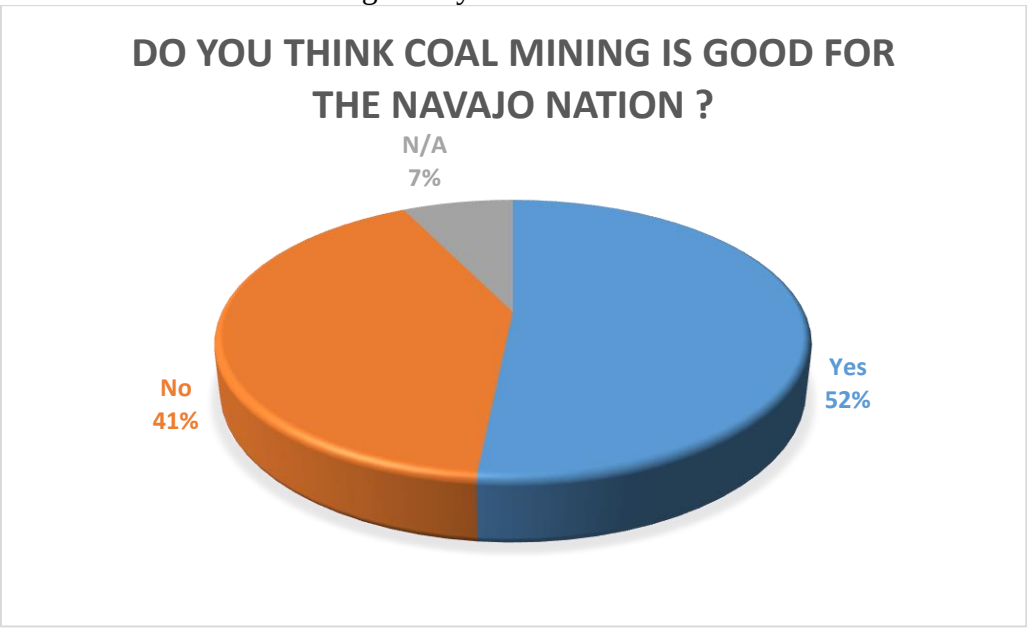
campaigns of the Sierra Club and has become a hallmark of U.S. environmentalism (Gottlieb 2005).

Especially Colorado Congressman Wayne Aspinall's opposition to CAP made the Marble Canyon Dam projects almost impossible to complete. He used committee rules in Congress to prevent CAP from getting a hearing in the House Interior and Insular Committee, which he chaired. According to a 1969 Washington Post by William Greider, Aspinall demanded that the Navajo Nation waive its claims to the water from the Upper Colorado River Basin to ensure his support in Congress for CAP. The Navajo Nation paid for Arizona's billion-dollar water project by waiving its rights for fifty years to the waters of the Upper Colorado River. To this day, the Navajo Nation do not have any major projects or access to these waters. Their claims remain unresolved. In 2013, SRP demanded that the same water waiving provision remain in the lease for an additional 25 years even after CAP was complete.

In this report, I offered the following points: 1) the Navajo Generating Station (NGS) was a subsidy from the Navajo Nation to the State of Arizona in the development of its water infrastructure; 2) because of social and political inequality between the federal government, states, and tribes, Navajo people bear the social, economic, and physical costs of underdevelopment. We see this in the testimony of tribal officials and the importance of coal to annual tribal budgets. In this regard, Navajo people have two kinds of benefits from coal, direct and indirect. Direct benefits are the jobs and senses of livelihood that coal provides to Navajo workers, both at the Kayenta Mine and the power plant. Indirect benefits are the monies that the tribal government spends on other salaries in the tribal government or monies afforded to community members. Regardless of what happens with NGS, the Navajo Nation will remain in a precarious situation. It still needs to secure water rights in the future, for either sustainable practices or development. The future of the tribe is limited without rights to water. The current arrangement between the tribe, SRP, and NGS precludes.

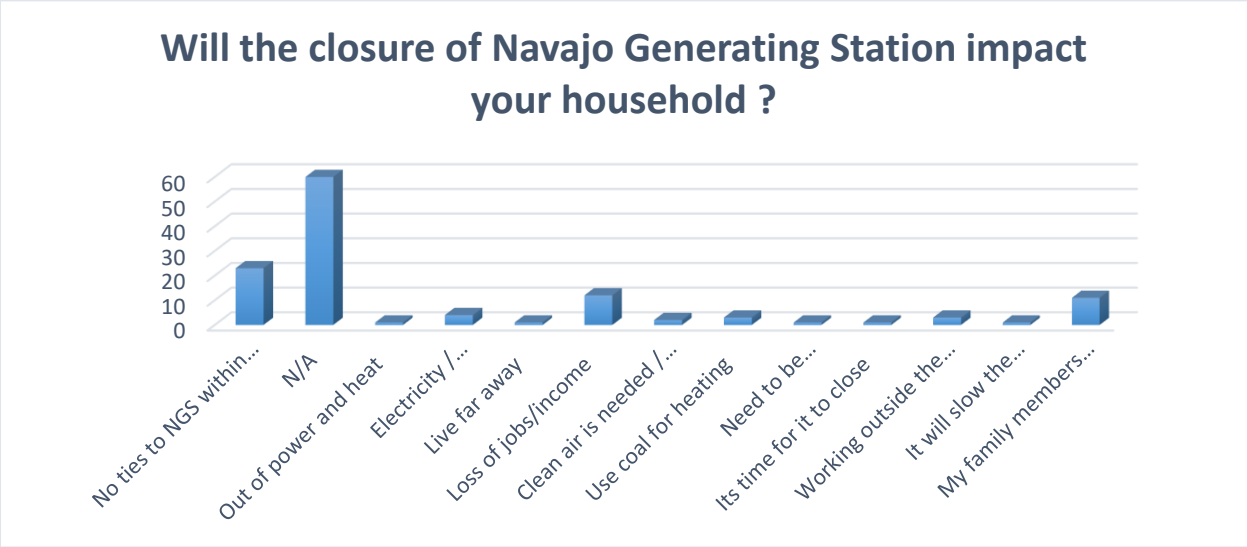
3. Current attitudes toward the Navajo Generating Station

Table 1. Attitudes toward coal mining in Kayenta



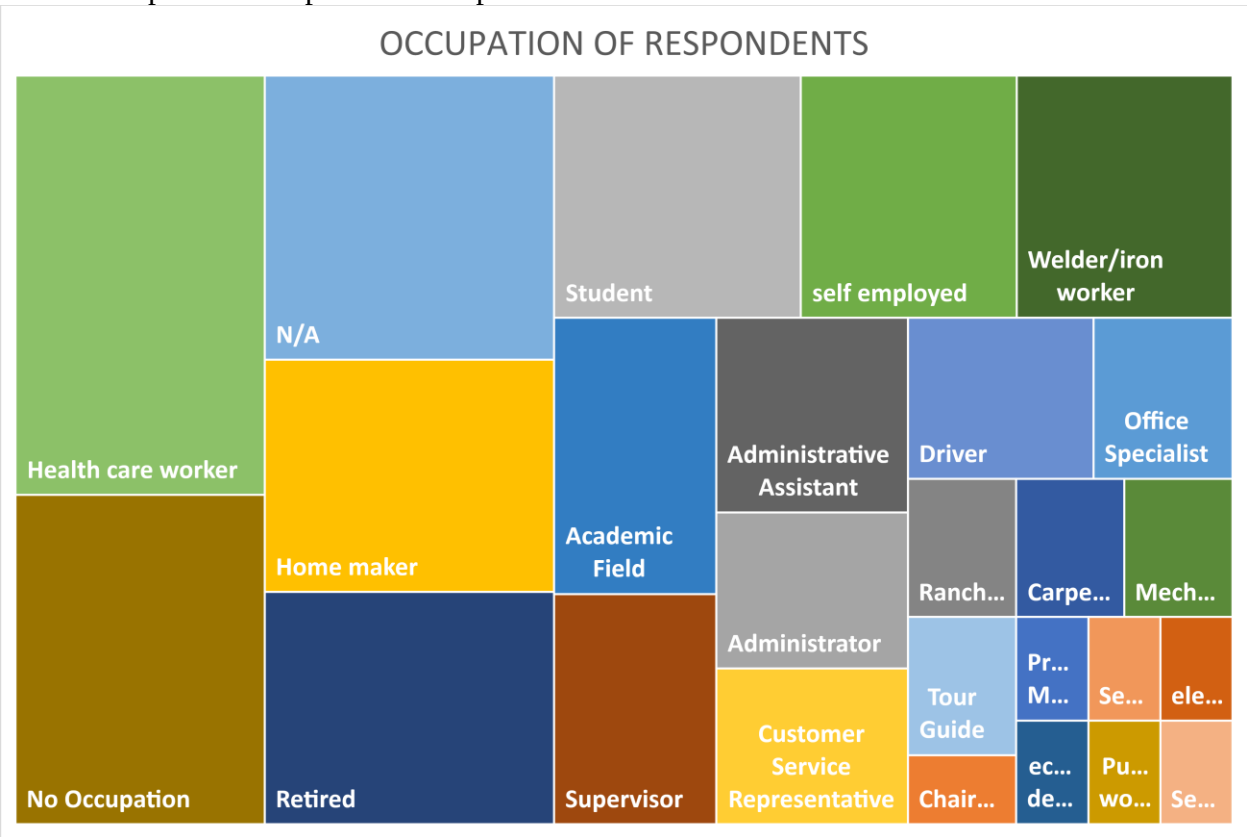
3/17 - 4/17, survey of Kayenta Fleamarket, n= 124 source: Dine Policy Institute

Table 2. Perceived Household Impact of Navajo Generating Station



3/17 - 4/17, survey of Kayenta Fleamarket, n= 124 source: Dine Policy Institute

Table 3. Reported Occupation of Respondents



3/17 - 4/17, survey of Kayenta Fleamarket, n= 124 source: Dine Policy Institute

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